**Lesson Topic:** Graphing Linear Equations/Graphing Quadratic Equations

If the equation is in slope-intercept form, we know the slope and the y-intercept. We need 2 points to graph a linear equation. Use the y-intercept to plot 1 point and then we use the slope to find the next.

Example: Graph the equation y = -2x + 4

If the equation is not in slope-intercept form, we first put the equation in slope-intercept form and then graph it the same way we did before.

Example: Graph the equation 4x − 2y = 10

Practice:

Graph the line y = −2x − 1

Graph the line 2y + 3x = 6

Using the calculator: graph the equation and then use the table to find points on the line

Can use the same method for graphing quadratic equations, but in addition to the points on either side of the parabola, we need to find the vertex. To find the vertex, the x-coordinate is –b/2a and then plug in to find the y-coordinate.

Example: Graph the equation y = -x2 – 4x + 12

Practice:

Graph the equation y = x2 + 4x – 5

Graph the equation y=x2 −6x+1